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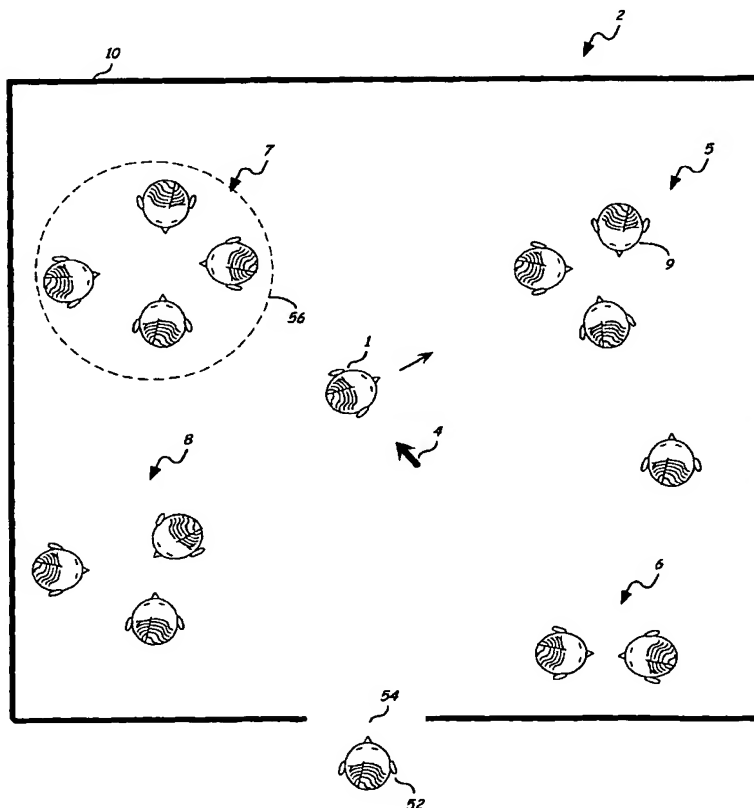
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[Continued on next page]

(54) Title: INTERACTIVE SPATIALIZED AUDIOVISUAL SYSTEM



(57) Abstract: An interactive spatialized audiovisual system links a plurality of remote used terminals. The system comprises a networked computer having an associated user database including user status information. Input means are provided at the computer for receiving a plurality of audio streams and associated locating data from the remote user terminals for virtually locating the users relative to one another within a virtual user environment such as a chat room environment. Selection means are provided for enabling selection of at least the first group of the audio streams in a first selection process based on status information in the user database. Output means output the selected group of audio streams and associated locating data for spatialization of the audio streams relative to a first listener-based audio reference frame which is substantially coherent with visual representations of the audio sources defined by the locating data at the first user terminal. Merging means are provided for merging at least some of the audio streams into a merged audio stream for transmittal to the first and other user terminal, with the merged audio stream being spatialized so as to provide for a spatialized background audio effect in the audio reference frame at the user terminal.



MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. ⁷: G06F 15/16, G10L 21/00, H04R 5/00, H04M 3/56, H04L 12/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

USPTO, DWPI (chat, avatar, virtual, spatialize, localize, audio, conference)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 349 055 A (MITEL CORPORATION), 18 th October 2000 the whole document	1-37
X	US 6,241,612 B1 (HEREDIA), 5 th June 2001 the whole document	1-37
X	GB 2 303 516 A (GPT LIMITED), 19 th February 1997 the whole document	1-37

☒ Further documents are listed in the continuation of Box C

☒ See patent family annex

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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 696 018 B1 (NIPPON TELEGRAPH AND TELEPHONE CORP), 20 th June 2001 the whole document (in particular, paragraph 27)	1-37
X	US 5,889,843 A (SINGER et al), 30 th March 1999 the whole document	1-6, 9, 16-37
X	US 5,347,306 A (NITTA), 13 th September 1994 the whole document (in particular, column 7, lines 17-30)	1-2, 4-6, 16-23, 26-35, 37
A	US 6,323,857 B1 (MIELEKAMP et al), 27 th November 2001 the whole document (in particular, column 5, line 37 – column 6, 33)	1-37
X, P	US 2002/0013813 A1 (MATSUOKA), 31 st January 2002 the whole document	1-6, 9, 16-37

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU03/00019

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
GB	2349055	CA	2304900		
US	6241612	NONE			
GB	2303516	EP	762717		
EP	696018	EP	942396	EP	942397
		US	5736982	JP	8186648
		JP	9009222	JP	9023275
US	5889843	AU	20648/97	EP	879545
				WO	9733450
US	5347306	EP	659018	JP	7255044
US	6323857	EP	835494	WO	9740461
US	2002013813	NONE			
END OF ANNEX					